# **Home Building and Residential Energy Efficiency**

**Advisory Panel** 

**Report Pursuant to** 

**Executive Order 09-22** 

November 20, 2009

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#### HOME BUILDING AND RESIDENTIAL ENERGY EFFICIENCY

#### **ADVISORY PANEL**

### **NOVEMBER 9, 2009**

Governor Jeremiah W. (Jay) Nixon Office of the Governor State Capitol, Room 216 Jefferson City, Missouri 65101

#### Dear Governor Nixon:

The Home Building and Residential Energy Efficiency Advisory Panel ("Advisory Panel") files this report pursuant to your Executive Order 09-22. Executive Order 09-22 charged this Advisory Panel with the following duties:

- 1. Determine how the State of Missouri could stimulate job creation and home ownership through the home building sector;
- 2. Determine how the State of Missouri could improve consumer access to energy-efficient measures in homes; and
- 3. Advise how the State of Missouri could help achieve these goals.

#### I. <u>Advisory Panel Members</u>

The following persons were appointed to serve on the Advisory Panel, representing the home building industry, banking institutions, real estate professionals, trade unions, community action agencies, along with experts in energy efficiency and "green" building:

Ralph Bicknese, Wildwood Gerald Feldhaus, St. Charles Bob Frost, Blue Springs Travis Graham, Blue Springs Bruce Greer, Marshall Andy Hosmer, Springfield Joe Hudson, Kansas City Sharon Keating, Jefferson City Marc Lopata, Clayton Jeff Martin, Cape Girardeau Elizabeth Mendenhall, Columbia Richard Millman, Ladue Stuart Murr, Springfield Jeffrey Reese, Independence Richard Reilly, St. Louis Tom Shimmens, Jefferson City Ken Stricker, Chesterfield Pat Sullivan, St. Charles Brad Williams, Eminence

## II. <u>Background</u>

The Members of the Advisory Panel filled out S.W.O.T. (Strengths, Weaknesses, Opportunities and Threats) Analysis forms to identify the challenges and opportunities facing the Panel. The Advisory Panel members met and discussed the economic implications of the Home Building Industry, the benefits of home ownership and the construction of homes that are energy efficient. One of the members of the Advisory Panel noted that the Home Building Industry represents "thousands of jobs" and can create "thousands of jobs," but also noted that the industry is "still under water" and "cannot stay under water much longer."

Another Panel member noted that energy efficiency improves the "quality and energy performance" of homes. Simply stated, then, the S.W.O.T. Analysis helped the Panel formulate discussion around measures that would stimulate job creation; measures that would improve access to home ownership; and measures that would encourage access to energy efficient homes, which would help all Missourians.

#### A. S.W.O.T Analysis

The following are a sampling of some of the individual S.W.O.T. Analysis comments made by individual members, not by the Panel as a whole:

#### Strengths

- ✓ Real Estate professionals agree that home buyers "are out there."
- ✓ Internet "hits" seeking information on homes available for sale are at all time highs.
- ✓ There is a market for better performing homes and many consumers are starting to look for that market.
- ✓ Some of the utility companies are implementing programs that can benefit residential projects.
- ✓ There are government tax incentives for the use of energy efficient systems.
- ✓ Many local governments provide energy audits.
- ✓ Demand for maintenance free homes should increase as the population ages.
- ✓ Many building codes require products be used with certain energy efficient levels.
- ✓ There is a strong resource base of smart builders that are interested in better performance.
- Missouri has an available, trained and capable home building workforce.

#### Weaknesses

✓ There are not enough state incentives or other drivers to encourage builders to provide more energy efficient homes.

- ✓ Cheap energy sometimes discourages home owners from investing in performance.
- ✓ The public's knowledge of building energy efficient homes is lacking.
- ✓ The public's knowledge of the availability of energy efficient homes is lacking.
- ✓ There are too many vacant lots and undeveloped subdivisions.
- ✓ Home builders are having difficulty getting access to capital.

#### Opportunities

- ✓ Small decreases in the sale price of homes "make a big difference" to potential home buyers.
- ✓ Many improved/unimproved lots are on the market and available at below market prices.
- ✓ Offering tax credits or rebates to new home buyers and or buyers of new homes that include energy efficient measures.
- ✓ The training of a skilled young work force.
- ✓ Educating existing homeowners on how to measure their homes for energy efficiency.
- ✓ To develop fast track approval systems from local governments and code inspectors in order to encourage smarter building and reward the process.
- ✓ Building industry has a very strong future due to those who know how to be upbeat and are able to adapt for future endeavors.
- ✓ Public service announcements regarding available energy efficiency programs, saving money with energy efficiency, taking advantage of tax credits, tax deductions, and other available programs.
- ✓ Providing consumers with a "best practices" guide to getting the most bang for the "green" buck.
- ✓ The need to assist home building is short-term, until a better market allows them to be self sustaining (perhaps twelve to 36 months).
- ✓ Potential to create thousands of jobs through the Home Building industry.

#### Threats

- ✓ Media perception that housing is fixed when it is not.
- ✓ Lack of buyer confidence.
- ✓ Mistrust of energy efficiency programs.

#### **B.** Home Building Market

Panel members in the housing industry state that, as a general rule, 15 jobs are created for every house built in the United States. The housing market continues to face challenges, however. An October 16, 2009 article from The National Home Builders' Association "Eye on the Economy," for example, states that "housing continues to be buffeted by multiple forces," including a "weak economy, dismal job market, foreclosures, fears of further declines in home values and tight credit conditions." Existing home sales in August 2009 nationwide fell for the first time since March 2009. New home sales in August 2009 nationwide were still below August 2008 sales. The U. S. Commerce Department reports that new construction on U. S. housing units rose less than forecast for September 2009. Housing "starts" (i.e., when new home construction begins) nationwide in September 2009 were down 28.2 % from September 2008. Applications for building permits in September 2009, which are a gauge of future construction activity, also fell.

# C. Energy Efficiency and "Green Building"

Panel members in the energy efficiency sector pointed out reasons to consider encouraging green energy efficiency home building in Missouri. Natural gas is the largest consumed source of energy for Missouri's residential sector; 58% of our state's natural gas supply is used for heating our homes. The U.S. Green Building Council (USGBC) indicates that the built environment in the United States accounts for 72% of electricity consumption; 39% of energy use; 38% of carbon dioxide emissions; 40% of raw materials use; 30% of waste output; and 14% of potable water consumption. Proponents of energy efficient building tout the following environmental and economic benefits, including enhancing and protecting ecosystems and biodiversity; improving air and water quality; reducing solid waste; conserving natural resources; reducing operating

costs; enhancing asset value and profits; improving employee productivity and satisfaction; and optimizing life-cycle economic performance.

To achieve the economic benefits and environmental protections noted above, the Energy Star program has strict guidelines set by the U.S. Environmental Protection Agency. Members of the Advisory Panel report that Energy Star is the national standard that all programs look at; it is the foundation of all energy programs. Homes that meet the Energy Star guidelines are at least 15% more energy efficient than homes built to the 2004 International Residential Code (IRC), and include features that typically make them 20—30% more efficient than standard homes.

### III. Recommendations

The following are recommendations from individual members of the Advisory Panel and, in some instances, recommendations from multiple members:

# A. Missouri Housing Development Commission Home Building, Home Ownership and Energy Efficiency Assistance

There are opportunities to stimulate home ownership, job creation in home building, and to incentivize energy efficiency through the Missouri Housing Development Commission.

By way of background, the MHDC is dedicated to financing, developing and preserving affordable housing, and accordingly, its programs have income limits for eligibility. In households of three or more persons in the St. Louis area, for example, the income limit for recipients is \$78,085 in "non-targeted areas," and \$95,060 in "targeted areas." A "targeted area" is an area in which at least 70% of families have an income that is 80% or less of the statewide median income, or an area of "chronic economic distress." MHDC has designated Jackson County, St. Louis County and the City of St. Louis as targeted areas, for example. In Jackson County, the income limit for households of three or more persons is \$80,960 in non-targeted areas, and \$98,560 in targeted areas. These income limits also vary by MHDC program and area of the state, but the foregoing gives a general outline of the income parameters involved.

At its September 2009 meeting, the MHDC authorized the use of \$20 million of its fund balances (money the MHDC has accumulated from its loan activity over the past 30 years) for the financing of gap loans and home purchases. The staff of the MHDC is to develop specific plans to carry out this plan and to bring recommendations to the MHDC at its December 2009 meeting.

Members of the Advisory Panel have several recommendations for the MHDC to consider with respect to the fund balance identified at its

September 2009 meeting that are consistent with the mission of the MHDC and the charge of this Advisory Panel.

First, in an effort to create jobs through new home construction and increase home ownership opportunities, the MHDC should consider awarding grants or other financial assistance to income-eligible buyers to be applied toward the purchase of newly constructed, never lived in homes. The grant or financial assistance would be for a specific amount per buyer. For purposes of illustration, the MHDC could determine that the grant amount for the purchase of a new home should be \$5,000 per buyer. Using \$5,000 merely as an example, such grants and financial assistance could facilitate the construction and purchase of 500 new, affordable homes at a total cost of \$2,500,000. Or, likewise, the MHDC could arrive at a different amount per buyer that the MHDC believed would sufficiently incentivize the construction and purchase of new homes by income-eligible buyers.

Second, to provide additional incentives for ownership and construction of energy efficient homes, the MHDC should consider grants or financial assistance to income-eligible buyers in a higher per buyer amount — double that of the grant in the preceding paragraph — to be applied to the purchase of a new home that meets or exceeds a Home Energy Rating System (HERS) rating or similar energy efficiency rating. If the MHDC determined that a new home grant would be \$5,000 per buyer as set forth in the preceding paragraph, for example, a new home energy efficiency HERS rating grant would be double that amount, which in this example would be \$10,000 per buyer. Some Panel members noted that an energy efficiency grant would need to be significantly larger than the new home grant outlined above to properly incentivize the purchase of a new, HERS-qualified or similarly qualified energy efficient home.

Third, the MHDC could incentivize energy efficiency by awarding grants or other financial assistance to retrofit an existing home for income eligible individuals to achieve a HERS Rating at an acceptable threshold. This might resemble the federal First Time Home Buyer program, in that the owner of the existing home, once the HERS rating is achieved, would fill out a form and submit it to MHDC, along with the HERS rating, and

then receive the grant money. Another manner of carrying out this idea for existing homes could be where a home buyer is purchasing an existing home, the purchaser is income eligible and wants to lower the HERS rating of the home that is being purchased. The grant money could be escrowed at closing and not paid out until the HERS rating is verified and certified by the appropriate inspector, and produced to the MHDC.

Finally, the MHDC should consider a grant program to income-eligible individuals to do a HERS Rating of their homes. Panel Members stated that a HERS Rating study costs approximately \$350 to \$500. Individuals could determine how they could improve the energy efficiency of their homes — at little or no cost to them — and determine how they could achieve cost savings through additional energy efficiency measures.

#### B. Educating the General Public About Energy Efficiency

The State of Missouri should increase efforts to educate the general public on residential energy efficient homes and green home building. This will also require the marketing of energy efficiency programs. Increased access to home energy efficiency programs and data, such as HERS ratings and the National Home Builders Association "Certified Green Professional " rating, should be made a part of education of the general public. The general public also needs to be informed on how they can achieve and/or use a HERS rating or a Certified Green Professional through educational programs.

Some of this education and marketing can be accomplished by the Governor participating in Public Service Announcements on television and radio. It is also worth noting that the State Energy Center, per Section 640.157 of the Missouri Revised Statutes, serves as the coordinator of energy sustainability activities in the state. The Energy Center should be encouraged to continue its coordination efforts and communication regarding, for example, state and federal energy efficiency and green building programs, tax credits, grants and the like, and to become a robust "one stop shop" for all this information, easily accessible to and by the public. Additionally, the State should consider

providing educational programs in conjunction with local government by facilitating residential energy "town hall" seminars on current best practices for energy efficiency and green building. The State should also target education initiatives to appropriate citizens groups, lawmakers, local governments, and service organizations, as well as encouraging professional organizations in the home building industry to increase awareness of energy efficiency measures and best practices.

### C. Property Tax Deferral for Unoccupied Homes

To address concerns that home builders lack adequate access to capital, some Panel Members suggest that Missouri should enact legislation, similar to legislation enacted in North Carolina this year, that would defer a portion of the real property tax due on property held for resale by a builder. The North Carolina legislation, House Bill 852, creates a special class of property for a residence owned and constructed by a builder, and defers that portion of the tax imposed on that property that represents the increase in value of the property attributable solely to the improvements constructed on the property by the builder. The taxes are carried forward as a lien, and are due when the builder transfers the property, sells the property, or when the residence is occupied. Panel members suggested that there be a sunset provision on this legislation, if enacted in Missouri. Note that Section 137.082 of the Missouri Revised Statutes allows counties to adopt the following provision: "newly constructed residential property which has never been occupied shall not be assessed as improved real property until such occupancy or the first day of January of the second year in which construction on the improvements was completed." According to a Panel member in the home building industry, 18 counties in Missouri have adopted this provision.

# D. Energy Efficiency Standardization Issues

Some Panel members believe the country is moving toward requiring that new homes meet certain energy efficiency ratings, and believe that the State should consider adopting a version of the International Energy Conservation Code (different versions of the IECC Code have been

promulgated in different years). Other Panel members noted that cost issues should be considered in such a discussion, and pointed out that there are differences between the 2006 IECC Code, for example, and the more recent IECC Code. Note that Missouri enacted Legislation in 2008 adopting the International Energy Conservation Code 2006 for the building of State buildings in the future and the renovation of State buildings over five thousand square feet when major energy systems are involved (see RSMo 8.812. 1).

#### E. Cost of Energy Audits and/or Energy Ratings

Panel members emphasized, as noted previously, the importance of a HERS rating in improving energy efficiency. A HERS rating involves an analysis of a home's construction plans and on-site inspection. Cost ranges from \$350 to \$500. Some utilities and local governments offer free or reduced cost HERS analysis. Although Section 143.121.8 of the Missouri Revised Statutes provides a tax deduction, some Panel members believe there should be direct incentives and assistance to homeowners to pay for a HERS analysis of an existing home or as part of the sale of a home.

#### F. Incentives for New Home Purchases

In an effort to create jobs in the home building industry and promote home ownership, some Panel members recommend that Missouri pass legislation similar to legislation passed this year in Utah and Kentucky that gives direct financial assistance to new home buyers, irrespective of income.

The Utah Housing Relief Special Revenue Fund, enacted in 2009, provides 1,600 grants of \$6,000 each to homebuyers purchasing newly constructed homes using \$10 million from the federal Recovery Act. Similarly, the State of Kentucky enacted a "New Home Tax Credit" in 2009 that provides a nonrefundable credit, up to \$5,000, against individual income tax allowable to a qualified buyer (for single family principal residence home). The entire program has a \$25 million cap.

Similar legislation in Missouri could have a sunset clause, recognizing the need for short-term action, and could provide for larger grant amounts for energy efficient homes.

## **G.** Additional Energy Efficiency Incentives

Panel members offered other suggestions for incentivizing energy efficiency in homes, including a sliding scale tax credit for lowering the HERS rating of a home; a state supplement to the federal tax credit for residential alternative energy improvements similar to the State of Maryland solar energy incentive program or geothermal program; and a tax exemption similar to the State of Indiana tax exemption for energy systems using solar water heat, solar space heat, wind, hydroelectric or geothermal power.

#### IV. Conclusion

The work of this Advisory Panel and this Report represent a short-term attempt by members of the home building industry, financial institution industry, real estate sector, community action agencies, labor unions and energy efficiency and green building experts to promote home ownership, stimulate job creation through home building and to promote access to residential energy efficiency measures. The members of the Advisory Panel appreciate the opportunity to participate in this important endeavor.